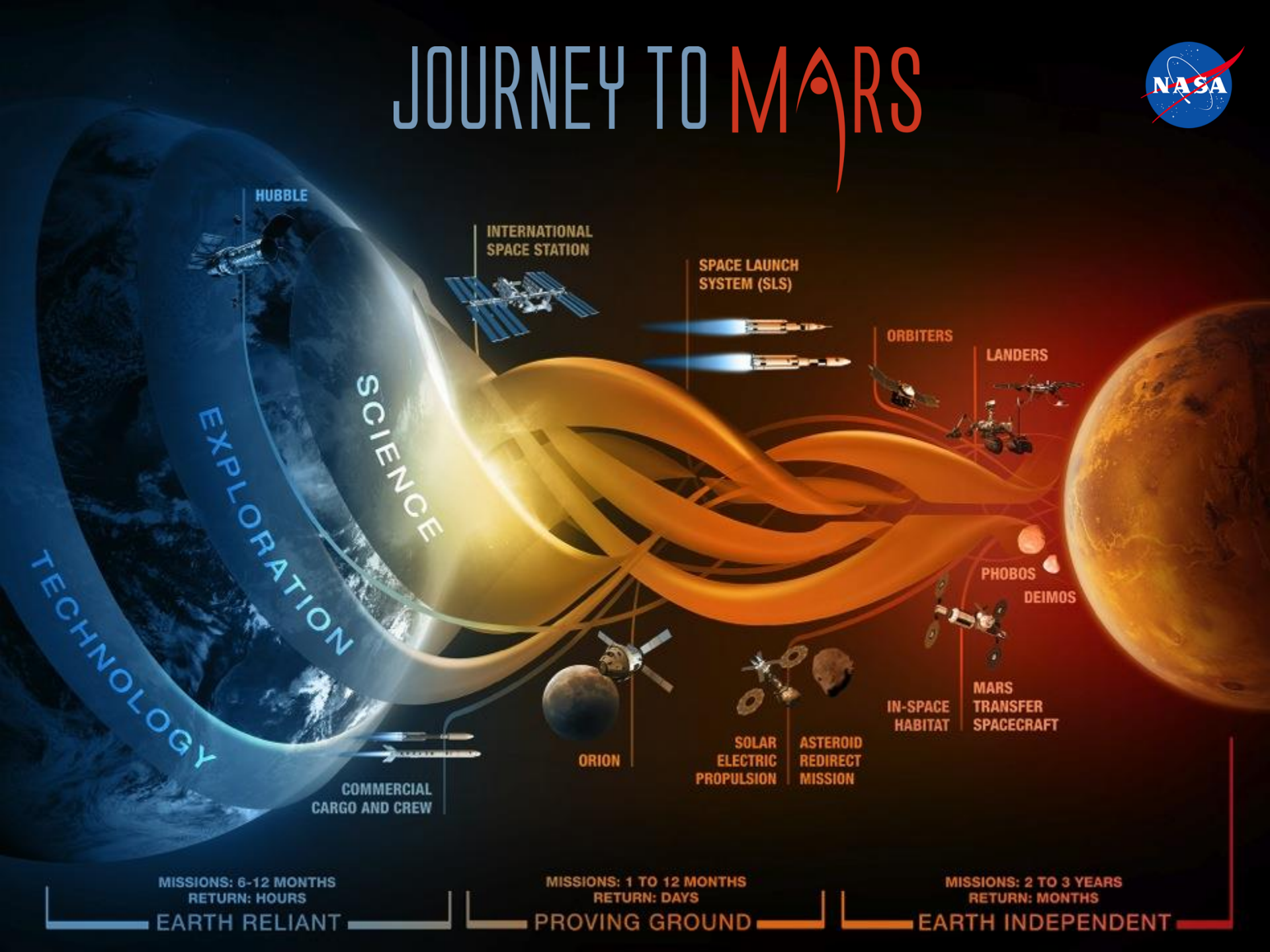
National Aeronautics and
Space Administration

Small Business Innovation Research
Small Business Technology TRansfer

Bob Jones
NASA Management Office
August 3rd, 2016

JOURNEY TO MARS



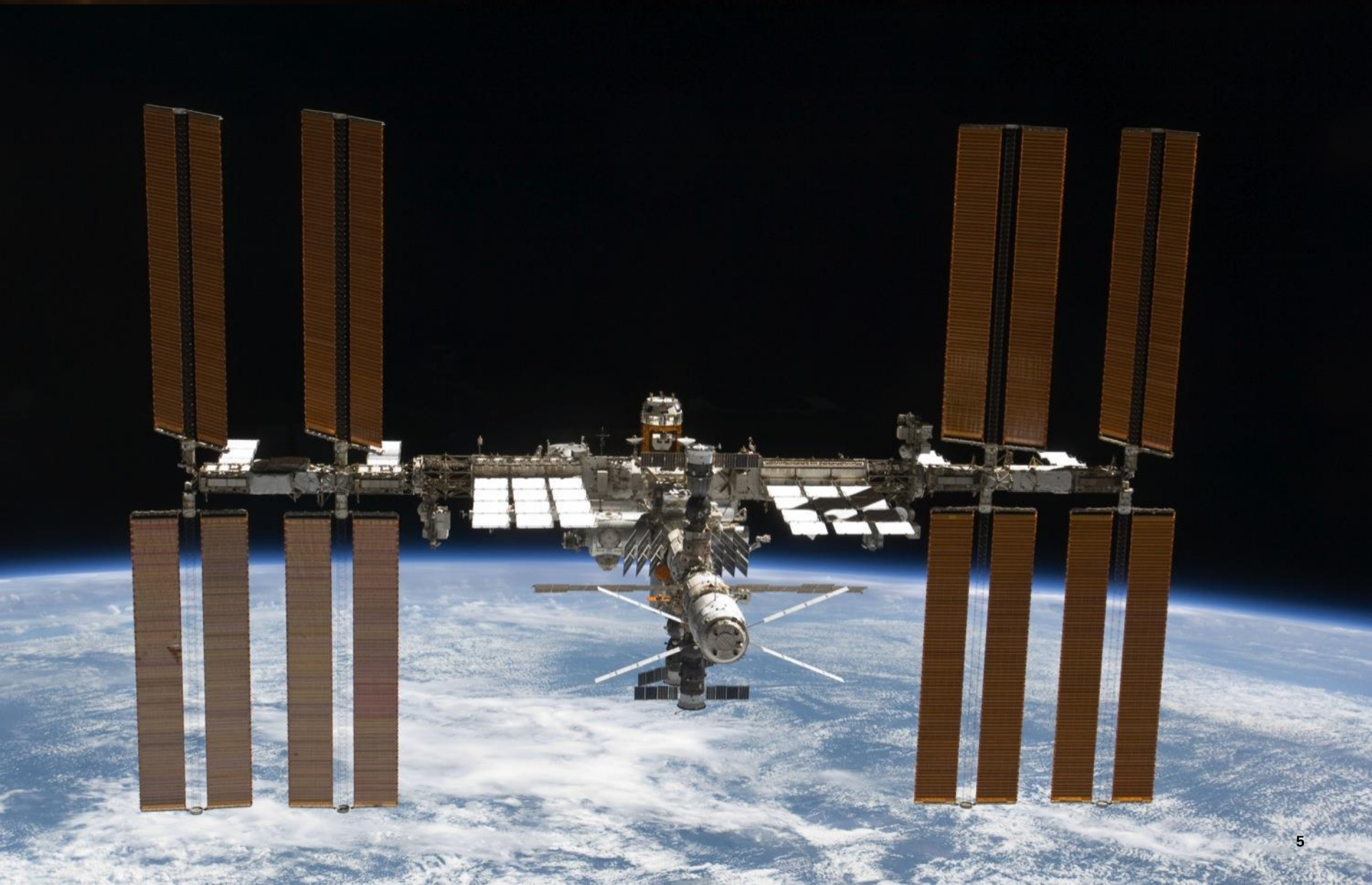
Starts Here on Earth

SBIR Assists in Emergency Communication Systems

Popular with U.S. military and intelligence agencies, the systems have been used in missile ranges, severe weather, and emergency response situations.

SRS TECHNOLOGIES

SBIR Farms & Manufactures in Space



Farming in Space

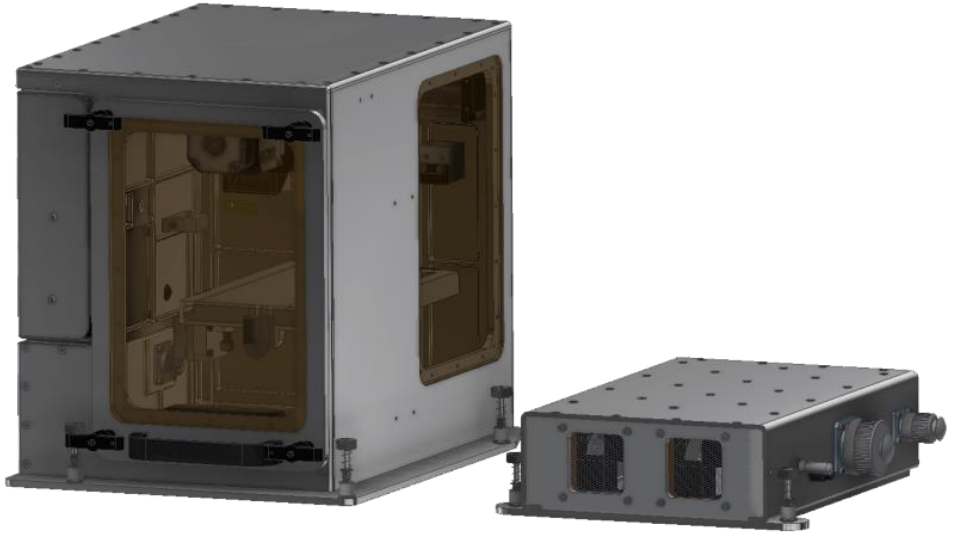
Aboard the International Space Station, there is a deployable fresh-food production system called VEGGIE. Astronauts use the system to grow red romaine lettuce and in the summer of 2015 sampled the first ever space-grown crop.

ORBITEC

First Zero-Gravity 3D Printer

Made In Space's Zero-G Printer was launched to the ISS in September 2014, making it the first company to manufacture in zero gravity. This will allow for lighter payloads in launch and real time manufacturing of necessities such as tools for repairs.

MADE IN SPACE

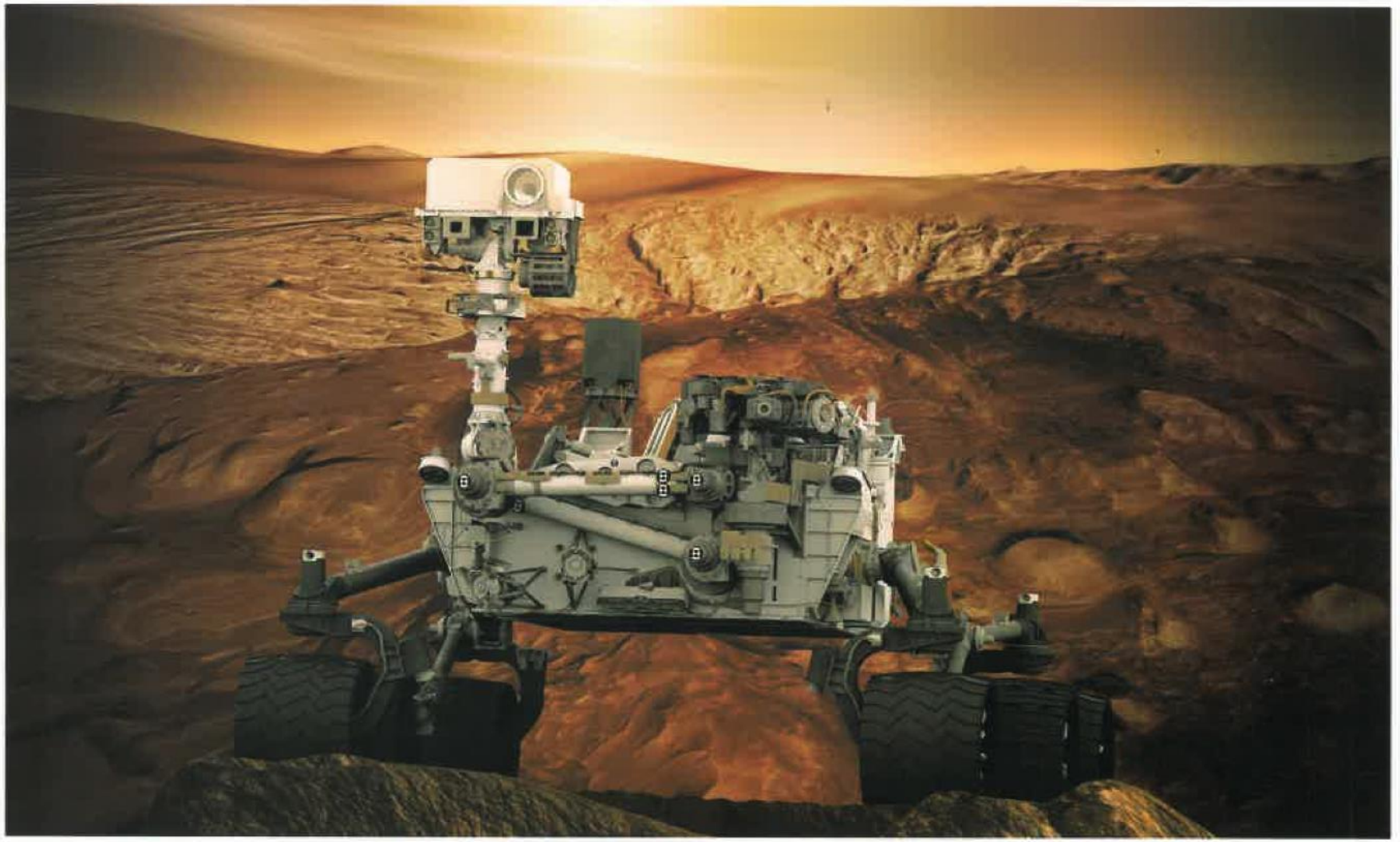


Bone Desitometer

The first x-ray machine flew up to the ISS in 2014. It has allowed NASA to study bone density in rats and can potentially be used to assess the extent of bone injuries in astronauts.

Techshot, Inc.

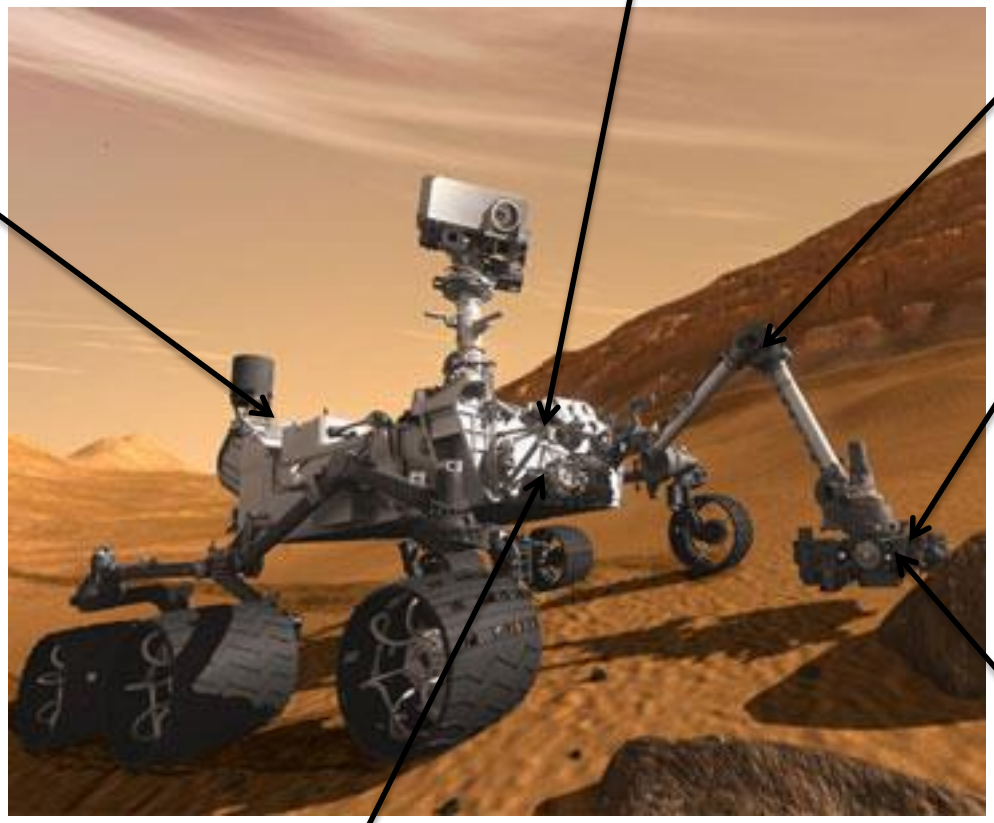
SBIR Lands on Mars



SBIR Technologies on Curiosity Rover

Yardney Technical Products
Lithium ion batteries

Creare
Space-qualified vacuum pump



Starsys Research, Boulder, CO
Gearboxes for robotic arm

Honeybee Robotics
Dust removal tool

inXitu
Chemistry and Mineralogy experiment (CheMin) instrument

GrammaTech
Software for rover operations

Program Background

- NASA's SBIR and STTR programs have awarded over $3.3B to research-intensive American small businesses to date.
- Engineers and scientists from over 12,000 Firms in all 50 States, DC and Puerto Rico have participated
- On average each year 1,700 NASA scientists and engineers support the program performing technical reviews

Eligibility Requirements

Small Business Innovation Research (SBIR)

1. Organized for-profit U.S. business
2. At least 51% U.S. owned by individuals and independently operated
3. 500 or fewer employees
4. PI's primary employment with small business during project
5. Intellectual Property Agreement

Small Business Technology Transfer (STTR)

1. Formal Cooperative R&D Effort with a U.S. Research Institution
2. Minimum 40% by small business, 30% by U.S. Research Institution
3. Small business is Prime, PI can be from SBC or Research Institution
4. Other SBIR Requirements Apply

Structure of the Programs

Phase I: Concept

- Award Guideline: $125K
- Duration: 6 months (SBIR)
  12 months (STTR)

Phase II: Full Research, R&D to Prototype

- Award Guideline: $750K
- Duration: 24 months
  - Phase II-E → 1:1 Matching up to $150K
  - Phase II-X → 2:1 Matching NASA up to $500K

Phase III: Commercialization/Infusion

- Non-SBIR/STTR funds
  - Contract from NASA program, other agency, prime contractor

2016 At a Glance

Annual Award Budget

- Currently, SBIR is 3.0% of R&D. In 2017, NASA will increase the SBIR investment to 3.2%
- STTR = .45% of R&D
- 2016 ~ $200M

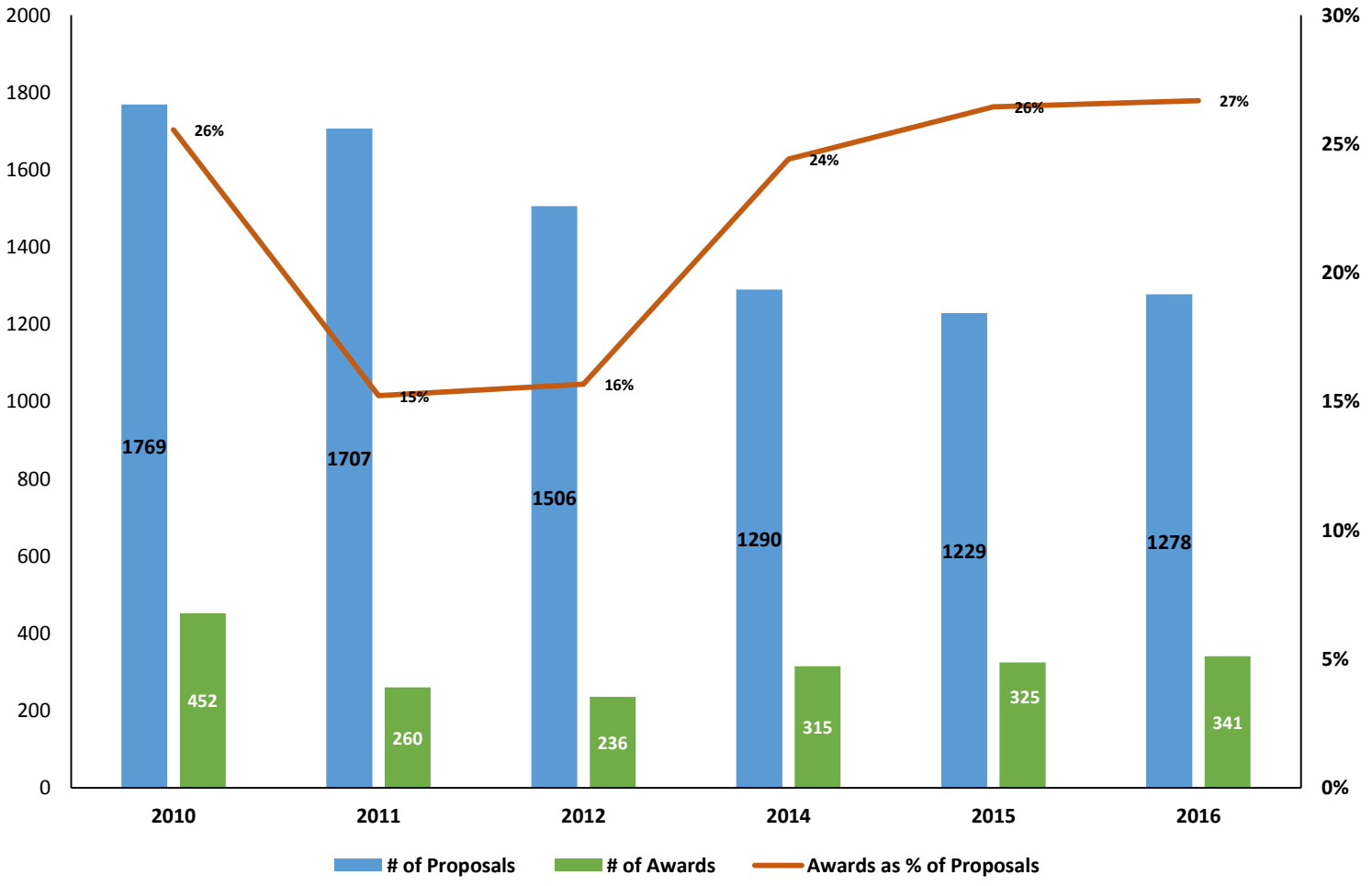
Awards:

- SBIR Awards: 341 Phase I and 137 Phase II
- STTR Awards: 58 Phase I; Phase II Awards will be selected in 4QFY16

SBIR Proposals vs. Awards

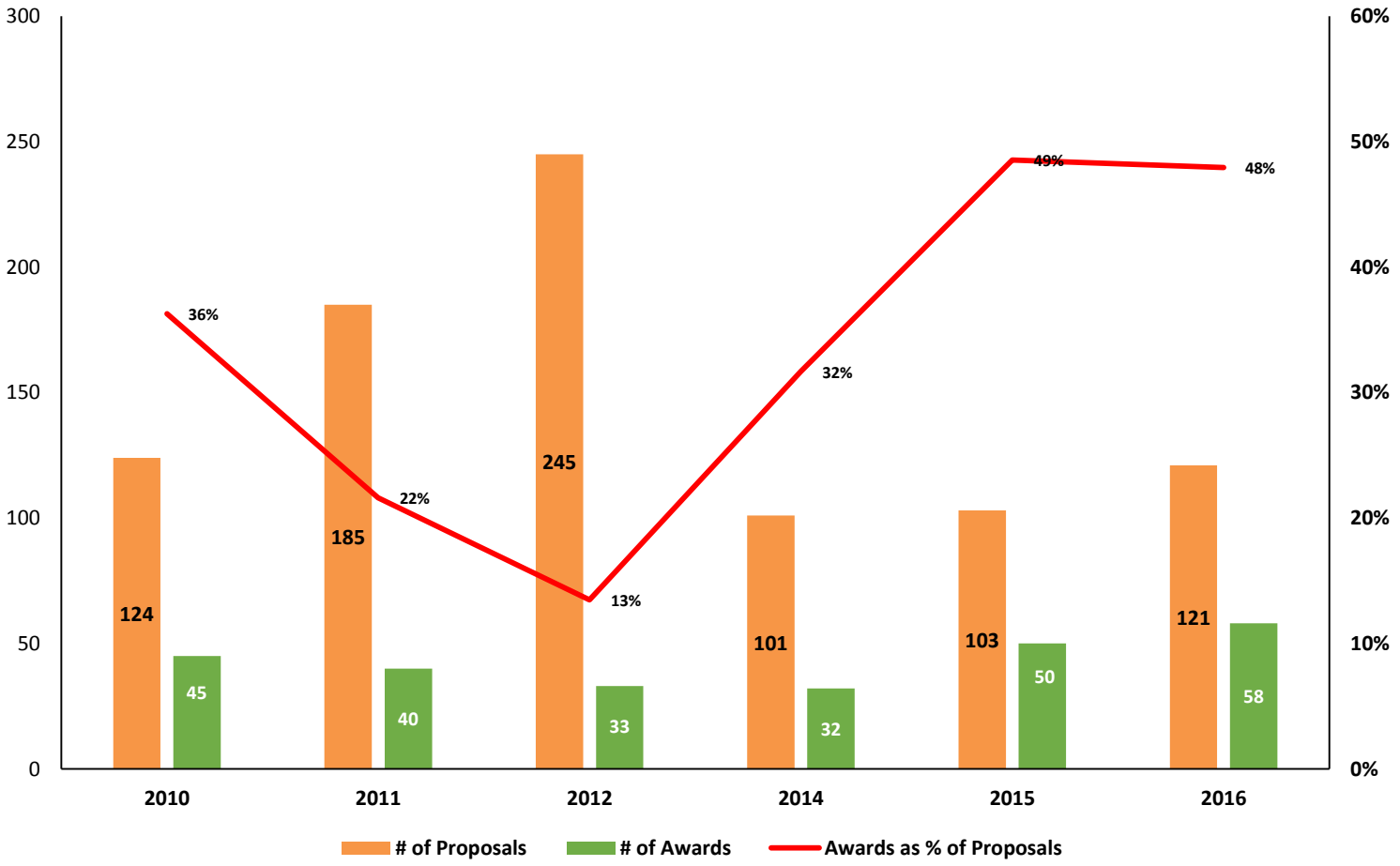
Phase 1

Proposals vs. Awards for SBIR



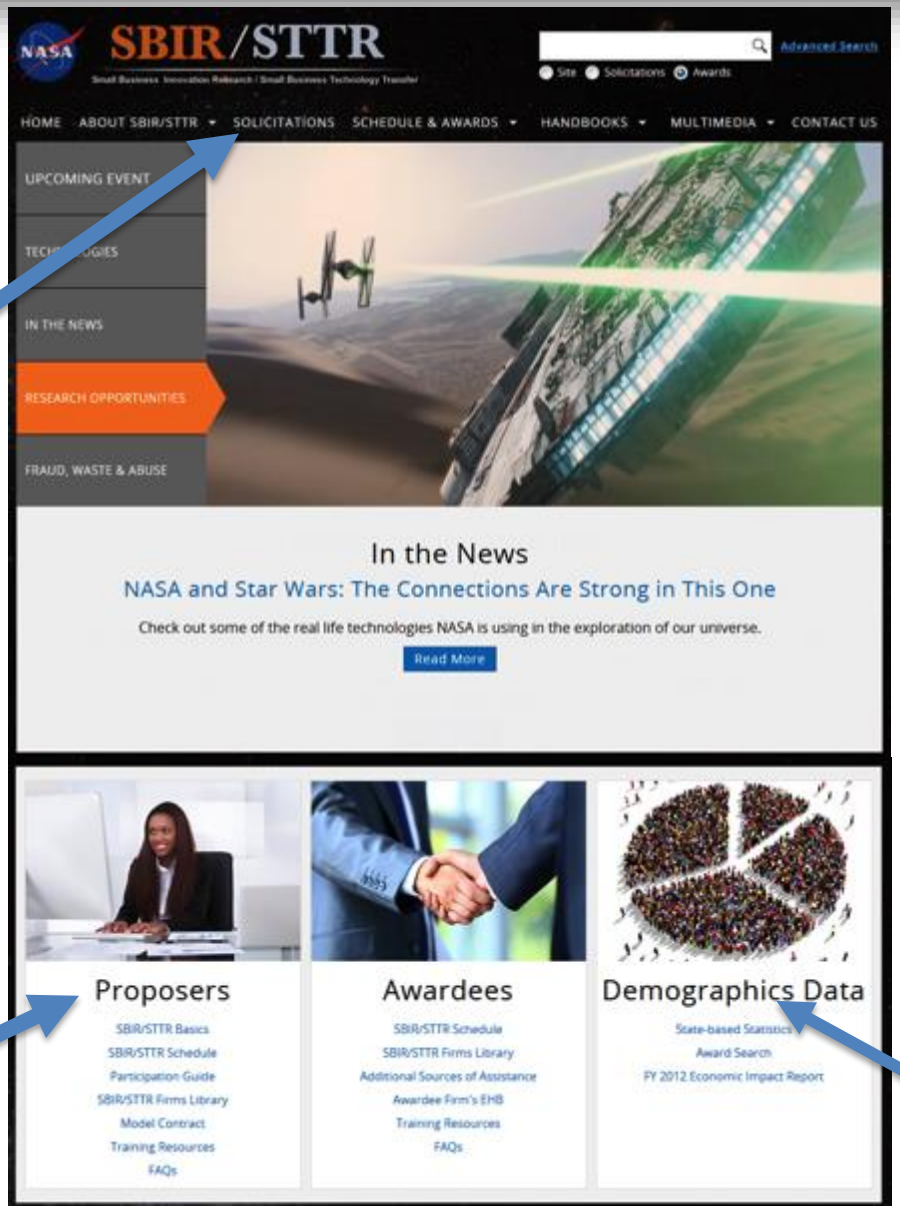
STTR Proposals vs. Awards

Phase 1
Proposals vs. Awards for STTR



NASA SBIR/STTR Website
www.sbir.nasa.gov

Access the PY 2016 Solicitations
(Next release date *November 2016)



Information for NEW firms available under "Proposers"

SBIR/STTR program analytics

Solicitations

Visit sbir.nasa.gov for prior year solicitations

Mentor-Protégé Program

The NASA Mentor-Protégé Program encourages NASA prime contractors to assist eligible protégés in enhancing their capabilities to perform on NASA contracts and subcontracts, fostering the establishment of long-term business relationships between these entities and NASA prime contractors, and increasing the overall number of these entities that receive NASA contract and subcontract awards.

For more information on the Mentor-Protégé Program please visit: http://www.osbp.nasa.gov/mpp/index.html.

Outreach Events

http://sbir.nasa.gov/events

Event Name	Dates	Location
HBCU/MI Event	August 3-4, 2016	Pasadena, CA
Small Satellite Conference	August 6-11, 2016	Logan, UT
GSFC HUB Zone Industry Day OSBP Council Meeting	August 9-11, 2016	Greenbelt, MD
SBIR Mid West Road Tour	August 15-19, 2016	Grand Forks, ND – Sioux Falls, SD – Ames, IA – St. Louis, MO – Indianapolis, IN
NSBE Aerospace Conference	August 24-27, 2016	Arlington, VA
NASA SBIR/STTR Subtopic Workshop	September 12-13, 2016	Moffett Field, CA
SCaN/SBIR Commercialization Workshop	Sept 14, 2016	Ames Research Center, CA
Small Business Association of New England	September 16, 2016	Waltham, MA
HCBU Road Tour for SBIR/STTR and Mentor-Protégé Program	September 27-29, 2016	Tallahassee, FL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How To Contact Us

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